

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014523**Date Inspected:** 01-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Liu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG TRIAL ASSEMBLY.

Lift 8 West.

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Manoj Prabhune Joint Survey Inspection for the following Segment 8AW from Panel Point (PP) 61 to PP 64.5

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly Survey Location is E1~ E2, S1 ~ S4, T1 ~ T3 Cope Hole Diameter from PP 61 to 64.5 Cross Beam and Counter Weight side.

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly at Intermediate Panel Point Survey Location is E1~ E2, S1 ~ S4, T1 ~ T2 Cope Hole Diameter from PP 61 to 64.5 Cross Beam and Counter Weight side.

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr. Manoj Prabhune Joint Survey Inspection for the following Segment 8BW from Panel Point 65 to PP 67

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Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly Survey Location is E1~ E2, S1 ~ S4, T1 ~ T3 Cope Hole Diameter from PP 65 to 67 Cross Beam and Counter Weight side.

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly at Intermediate Panel Point Survey Location is E1~ E2, S1 ~ S4, T1 ~ T2 Cope Hole Diameter from PP 65 to 67 Cross Beam and Counter Weight side.

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr. Manoj Prabhune Joint Survey Inspection for the following Segment 8CW from Panel Point 68 to PP 71

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly Survey Location is E1~ E2, S1 ~ S4, T1 ~ T3 Cope Hole Diameter from PP 68 to 71 Cross Beam and Counter Weight side.

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly at Intermediate Panel Point Survey Location is E1~ E2, S1 ~ S4, T1 ~ T2 Cope Hole Diameter from PP 68 to 71 Cross Beam and Counter Weight side.

The measured readings were data recorded, generated the report and submitted to the Team Leader.

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint SEG045B-027. Welder is identified as 048696. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132.

FCAW of weld joint SEG043A-043. Welder is identified as 066236. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U4b-F.

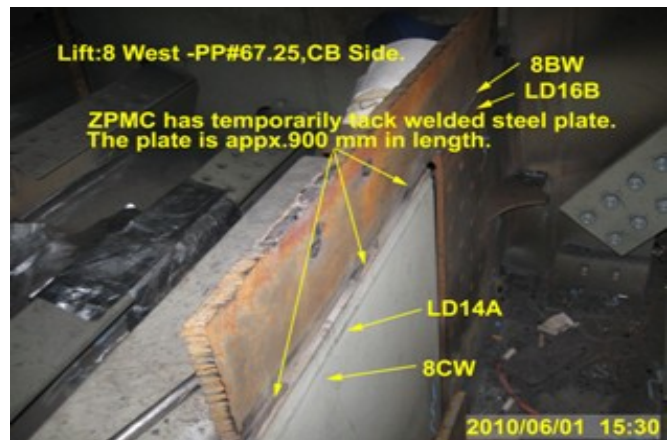
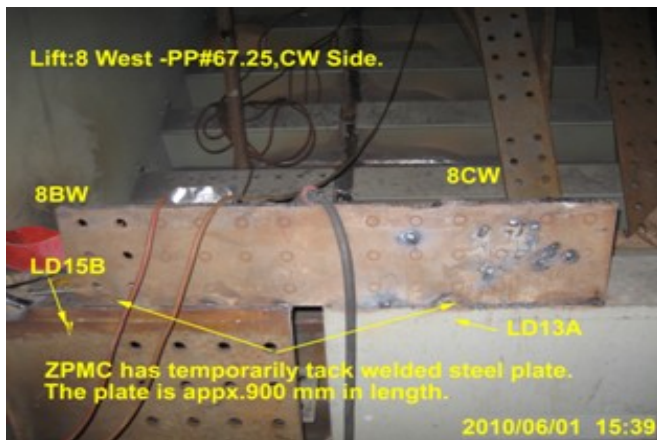
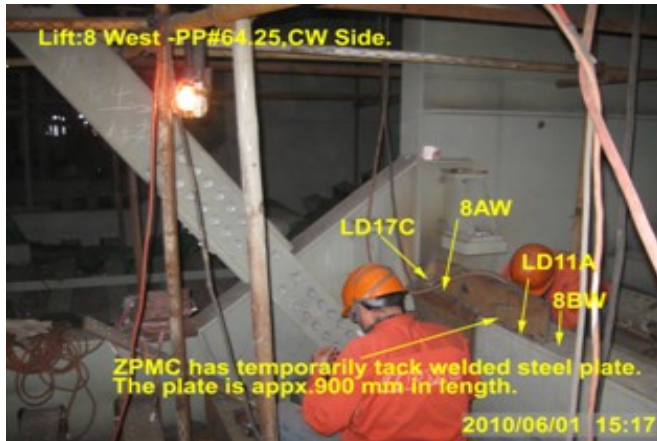
During the Quality Assurance (QA) random visual inspection of Orthotropic Box Girder (OBG) Longitudinal Diaphragm (LD) at Lift 8 West, this QA Inspector observed ZPMC has temporarily tack welded steel plates on top of the LD's at 3 locations. The approved shop drawings do not specify any welds in these locations. The LD's are identified as: LD17C and LD11A, LD15B and LD13A, LD16B and LD14A. The material composition of the added steel plate being welded to the LD's is not known.

This QA Inspector generated an incident report on this date, for further information see the incident report and attached pictures.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhu,Surendra

Quality Assurance Inspector

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**Reviewed By:** Hall,Steven

QA Reviewer